WHAT IS CLAIMED IS:

1. A composition to improve bioenergy metabolism of cells comprising two or more chemical substances of Krebs cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors thereof.

2. The composition according to claim 1, wherein the chemical substances of Krebs cycle are selected from the group consisting of succinate, fumarate, L-malate, and α-ketoglutarate.

3. The composition according to claim 1, wherein the chemical substances of Krebs cycle are selected from the group consisting of citrate, cis-aconitate, isocitrate, oxalsuccinate, α-ketoglutarate, succinyl-coenzyme A, succinate, fumarate, L-malate, oxalacetate, acetyl-coenzyme A and pyruvate.

4. A composition to improve bioenergy metabolism of cells comprising two or more chemical substances of respiratory chain cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors thereof.

5. The composition according to claim 4, wherein the chemical substances of respiratory chain cycle are selected from the group consisting of ubiquinone, ubiquinol, heme a, heme b and heme c.

6. A composition to improve bioenergy metabolism of cells comprising two or more chemical substances of urea cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors.

7. The composition according to claim 6, wherein the chemical substances of urea cycle are selected from the group consisting of citrulline, argininosuccinate, arginine, ornithine and aspartate.

8. A composition of any one of claims 1-7, further comprising one or two of

biochemical compounds selected from the group consisting of lipoic Acid, lipoamide, acetyl-lipoamide, lysine, carnitine, ascorbate, thiamine, riboflavin, nicotinic acid, niacinamide, pantothenate, nicotinamide-adenine dinucleotide, reduced nicotinamide adenine dinucleotide, nicotinamide-adenine dinucleotide phosphate, reduced nicotinamide adenine dinucleotide, quinolinate, flavin-adenine dinucleotide, reduced flavin-adenine dinucleotide, flavin mononucleotide, reduced flavin mononucleotide, adenosine diphosphate, adenosine triphosphate, guanosine diphosphate, guanosine triphosphate, magnesium ion, calcium ion, manganese ion, copper iron-sulfate and molybdenum.

9. The composition according to any one of claims 1-7, wherein the composition is provided to a human subject in the form of tablets, pills, injections, infusions, inhalations, suppositories or other pharmaceutically acceptable carriers and/or means of delivery.

10. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises two or more chemical substances of Krebs cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors thereof.

11. The method according to claim 10, wherein the chemical substances of Krebs cycle are selected from the group consisting of succinate, fumarate, L-malate, and α-ketoglutarate.

12. The method according to claim 10, wherein the chemical substances of Krebs cycle are selected from the group consisting of citrate, cis-aconitate, isocitrate, oxalsuccinate, α-ketoglutarate, succinyl-coenzymA, succinate, fumarate, L-malate, oxalacetate, acetyl-coenzyme A and pyruvate.

13. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises two or more

chemical substances of respiratory chain cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors thereof.

14. The method according to claim 13, wherein the chemical substances of respiratory chain cycle are selected from the group consisting of ubiquinone, ubiquinol, heme a, heme b and heme c.

15. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises two or more chemical substances of urea cycle, wherein the chemical substances are intermediates of the cycle and/or precursors and cofactors.

16. The method according to claim 15, wherein the chemical substances of urea cycle are selected from the group consisting of citrulline, argininosuccinate, arginine, ornithine and aspartate.

17. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Succinate	0.01-100 mg
Fumarate	0.01-100 mg
L-Malate	0.01-100 mg
α-Ketoglutarate	0.01-100 mg

18. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Pyruvate	0.01–100 mg
Acetyl-Coenzyme A	0.01–100 mg
Citrate	0.01-100 mg

Cis-Aconitate	0.01-100 mg
Isocitrate	0.01–100 mg
Oxalsuccinate	0.01–100 mg
2-Oxo-Glutarate	0.01–100 mg
Succinyl-CoenzymA	0.01-100 mg
Oxaloacetate	0.01-100 mg

19. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Coenzyme Q-10 (Ubiquinone)	0.01–20 mg
Ubihydroquinone (Ubiquinol)	0.01–20 mg
Heme a (Part of Cytochrome a)	0.01-20 mg
Heme b (Part of Cytochrome b)	0.01-20 mg
Heme c (Part of Cytochrome c)	0.01-20 mg

20. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Citrulline	0.01-100 mg
Argininosuccinate	0.01-100 mg
Arginine	0.01-100 mg
Ornithine	0.01-100 mg
Aspartate	0.01-100 mg

21. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Lipoic Acid	0.01–100 mg

Lipoamide (Lipoic Acid + Lysine)	0.01-100 mg
Acetyl-Lipoamide	0.01-100 mg
Lysine	0.01-100 mg
Carnitine	0.01–100 mg
Ascorbate	0.01–200 mg
Thiamine	0.01-10 mg
Riboflavin	0.01-10 mg
Nicotinic Acid	0.01-10 mg
Niacinamide	0.01-10 mg
Pantothenate	0.01-10 mg
Nicotinamide-Adenine Dinucleotide (NAD)	0.01-10 mg
Reduced Nicotinamide Adenine Dinucleotide (NADH)	0.01-10 mg
Nicotinamide-Adenine Dinucleotide Phosphate (NADP)	0.01-10 mg
Reduced NADP (NADPH)	0.01-10 mg
Quinolinate (NAD/NADP precursor)	0.01-10 mg
Flavin-Adenine Dinucleotide (FAD)	0.01-10 mg
Reduced Flavin-Adenine Dinucleotide (FADH)	0.01-10 mg
Flavin Mononucleotide (FMN)	0.01-10 mg
Reduced Flavin Mononucleotide ($FMNH_2$)	0.01-10 mg
Adenosine Diphosphate (ADP)	0.01-10 mg
Adenosine, Triphosphate (ATP)	0.01-10 mg
Guanosine Diphosphate (GDP)	0.01-10 mg
Guanosine Triphosphate (GTP)	0.01-10 mg
Magnesium (Mg^{++})	0.01-10 mg
Calcium (Ca^{++})	0.01-10 mg
Manganese (Mn^{++})	0.01-10 mg
Copper	0.01-10 mg
Iron-Sulfate	0.01-10 mg
Molybdenum	0.01-10 mg

22. A method for improving bioenergy metabolism of cells, comprising the step of administering to a human a composition which comprises:

Biochemical Substances	**Amount/Day**
Succinate	100 mg
Fumarate	100 mg
L-Malate	100 mg
A-Ketoglutarate	100 mg
Pyruvate	100 mg
Acetyl-CoA	100 mg
Citrate	200 mg
Cis-Aconitate	100 mg
Isocitrate	100 mg
Oxalsuccinate	100 mg
2-Oxo-Glutarate	100 mg
Succinyl-Coenzyme A	100 mg
Coenzyme Q-10 (Ubiquinone)	20 mg
Ubihydroquinone (Ubiquinol)	20 mg
Arginine	100 mg
Carnitine	100 mg
Lysine	100 mg
Ascorbate	200 mg
Thiamine	10 mg
Riboflavin	10 mg
Nicotinic Acid	10 mg